

A NEW SPECIES OF ENLINIA FROM OKLAHOMA
(DIPTERA: DOLICHOPODIDAE)

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ABSTRACT—*Enlinia robinsoni*, n. sp., is described from specimens taken from mating swarms of a simuliid fly in Murray County, Oklahoma.

Among material submitted for determination by William K. Reisen, University of Oklahoma, was a new species of the genus *Enlinia* collected from mating swarms of a simuliid. This is the first record of the genus from the central part of the United States and makes it appear likely that species of the genus may eventually be found almost anywhere in the country. I am grateful to Dr. Reisen for the opportunity of describing this most interesting fly.

Enlinia robinsoni Steyskal, new species
fig. 1-7

Male: Length of body and wing 1.25 mm each. Color brown, with middle of mesoscutum blackish with blue-green metallic reflections; front black with trace of greenish reflection; antenna blackish, arista brown; wing hyaline, except for 3 spots of brown pigment, 1 on node of radial vein and 2 on veins in the petiole of the wing (fig. 1); bristles brown to black, those of mesoscutum yellowish.

Head large; eyes approximated on face, separated by approximately 15 μ and attaining oral margin laterally, anterior ommatidia noticeably enlarged; antenna as in fig. 2, 3rd segment discoid, arista inserted centrally on slight elevation.

Thorax strongly convex above, but almost posterior half between dorsocentral bristles gently concave; dorsocentral bristles 7, hindmost pair much the largest.

Legs unicolorous brown; foreleg as in fig. 3, coxa with strong mesal bristle close to apex, femur with 9 or 10 small ventral spinules increasing in size toward tip of femur, tibia ordinary, tarsus greatly modified as shown; midleg as in fig. 4, femur with long ventral spinules near base and several much smaller bristles apicad thereof, tibia somewhat thickened and in apical $\frac{1}{3}$ below with patch of numerous erect setae; hindleg lacking distinctive hairs, bristles, or conformation.

Wing as in fig. 1, posterior margin sinuate, 3rd vein bent backwards beyond crossvein, entire surface covered with uniform microsetation.

Abdomen with tip as in fig. 5; 4th sternum narrowed medially and with small posterior projection; 5th sternum with depressed, triangular median portion and pair of lateral pieces turned ventrad apically; surstylus cuneate, with erect dorsal seta close to apex; cerci small, depressed, with tips turned outward and bearing tufts of fine hairs.

Female: Similar to male, except for sexual characters; wing plain (fig. 6), but with 3 brown subbasal spots similar to those of male; eye with uniform ommatidia,

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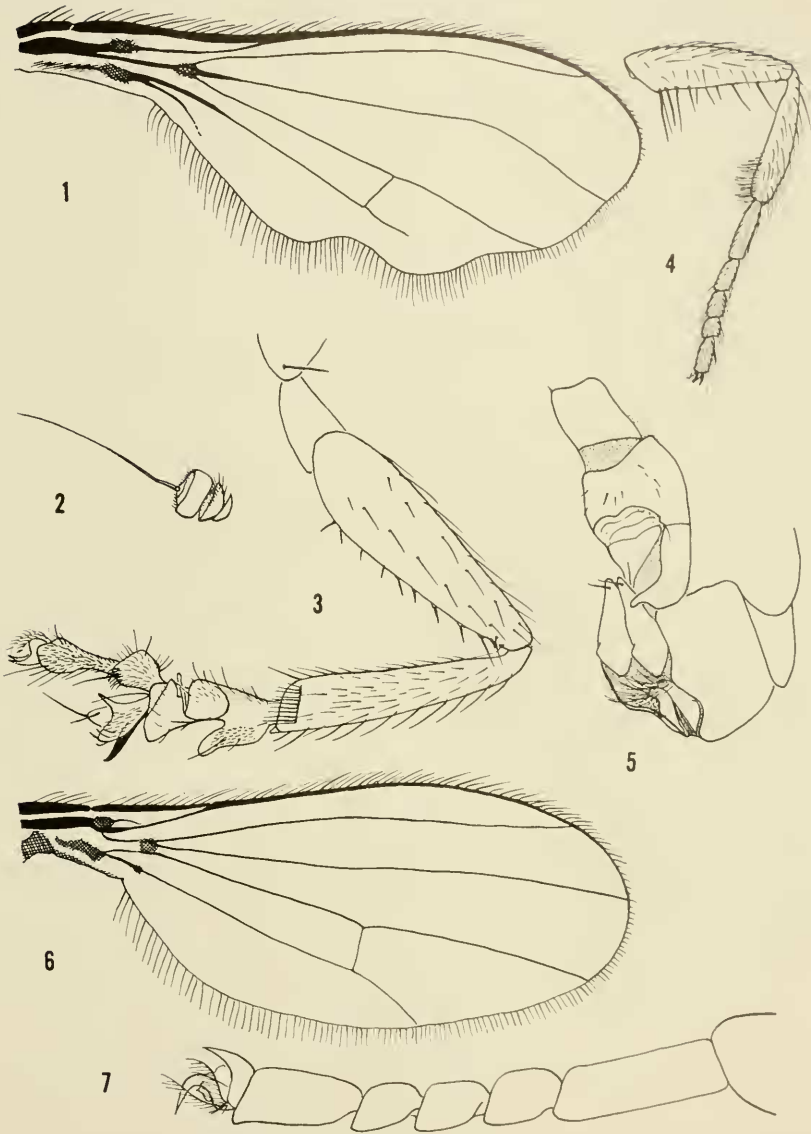


Fig. 1-7. *Enlinia robinsoni*, n. sp. 1, wing of male. 2, antenna of male. 3, foreleg of male, left, anterior view. 4, midleg of male, left, anterior view. 5, male abdomen, oblique lateroventral view of tip. 6, wing of female. 7, foretarsus of female.

separated on face about twice as far as in male; foretarsus (fig. 7) plain, length of segments from base to tip 0.35, 0.15, 0.14, 0.125, and 0.235 of total length of tarsus.

Holotype (male) and allotype, Turners Falls, Murray County, Oklahoma, 8 July 1972, from mating swarm of Simuliidae (Wm. K. Reisen); no. 73006 in U.S. National Museum, including wings and legs of both sexes mounted in euparal on 2 microscope slides. There are also 2 female specimens lacking heads.

The name of the species is a noun in the genitive case given in recognition of Harold E. Robinson's excellent work in bringing to light these tiny, inconspicuous insects.

Enlinia robinsoni is apparently most closely related to *E. plumicauda* Robinson, a Mexican species to which it will run in the key by Robinson (1969). It agrees with that species in its very similarly conformed wing and legs, but differs therefrom in details of those parts. The postabdomen lacks the plumose appendages from which the name of *E. plumicauda* is derived, there is no pigmented streak in the anal area of the wing, and the penultimate segment of the foretarsus is much shorter than in *E. plumicauda*. Of the North American species treated in Robinson and Arnaud (1970), none is very much like *E. robinsoni*, although the presence of the apicomeral bristle of the forecoxa and the structure of the last preabdominal sternum indicate its relationship with *E. magistri* (Aldrich). It is likely that many more species of *Enlinia* in the United States await discovery and description; it is therefore premature to make a revised key to the species.

REFERENCES

- Robinson, H. 1969. A monographic study of the Mexican species of *Enlinia* (Diptera: Dolichopodidae). *Smithson. Contrib. Zool.* 25:1-62.
- Robinson, H. and P. H. Arnaud, Jr. 1970. The genus *Enlinia* Aldrich in America north of Mexico (Diptera: Dolichopodidae). *Occas. Pap. Calif. Acad. Sci.* 83:1-9.